

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	144-18
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 21.0 kDa, a single non-glycosylated polypeptide chain containing 180 amino acids.
Quantity:	5µg/25µg/1000µg
AA Sequence:	EENVDFRIHV ENQTRARDDV SRKQLRLYQL YSRTSGKHIQ VLGRRISARG EDGDKYAQLL VETDTFGSQV RIKGKETEFY LCMNRKGLV GKPDGTSKEC VFIEKVLNEN YTALMSAKYS GWYVGFTHKG RPRKGPKTRE NQQDVHFMKR YPKGQTELQK PFKYTTVTKR SRRIRPTHPG
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by thymidine uptake assay using FGF-receptors transfected BaF3 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0 × 10 ⁶ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, 500 mM NaCl.
Endotoxin:	Less than 1 EU/µg of rRtFGF-18 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C . Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Rat Fibroblast Growth Factor-18

Rat FGF-18 is encoded by the FGF18 gene in rats. By phylogenetic analysis and gene location analysis, FGF-18 is divided into FGF-8 subfamily which has three members FGF-8, FGF-17 and FGF-18. Using FGF knockout mice model, the numbers of this subfamily were testified that have crucial roles of in embryo development. FGF-18^{-/-} mice have decreased expression of osteogenic markers and delayed long-bone ossification. FGF-18 also has significant roles in lung development and has an anabolic effect on cartilage formation. Additionally, it has been shown in vitro that this protein is able to induce neurite outgrowth in PC12 cells. Rat FGF-18 shares 98% amino acid sequence identity with human.